Navy Yard, General Foundry
(Building 137)
Navy Yard Annex
Washington
District of Columbia

HABS No. DC-442-A

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
MID-ATLANTIC REGION NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
PHILADELPHIA, PENNSYLVANIA 19106

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HISTORIC AMERICAN BUILDINGS SURVEY

NAVY YARD, GENERAL FOUNDRY (BUILDING 137) HABS No. DC-442-A

Location:	Washington Navy Yard Annex, on the South side of Tingey Street between 4th and 5th Streets, extended. UTM: 18.326490.4304500 Quad: Alexandria
Date of Construction:	1912-1914 Additions and Alterations 1917-1951
Present Owner:	General Services Administration Region 3
Present Use:	Warehouse
Significance:	The Washington Navy Yard Annex was historically significant in the manufacture of large scale ordnance during World Wars I and II. Foundry Building 137 originally housed both brass and steel founding operations for the Yard. Its primary role was the casting of small steel parts and forgings for the smaller guns. It is a typical example of foundry architecture of the early part of this century.
Architect:	Not known
Project Information:	Demolition of the General Foundry is to be funded by the Urban Mass Transit Administration. Under Executive Order 11593 and the National Historic Preservation Act of 1966, mitigative documentation was undertaken in 1981 by historian Kathleen Coelos of Wallace, Roberts and Todd, Environmental Consultants, for the Washington Mass Transit Authority.

Historical Information:

Foundry Building 137 was built between 1912 and 1914 unde the supervision of the Office of the Bureau of Yards and Docks. It operated as both a brass and steel foundry until 1918 when a separate brass foundry, Building 158, was built. Because private steel manufacturers, such as Andrew Carnegie, supplied the forgings for the large scale ordnance produced at the Navy Yard, it is believed that Building 137 cast smaller steel parts, and rough cas ing and forging for smaller guns. (Building Conservation Technology, Inc. (BCT), 1976.)

The original foundation plan of 1912 shows twenty 20 foot wide bays for a building 402' long by 131' wide. In 1917-1918 World War I stimulated production and 10 more bays were added to the south, extending the building length to 602 feet. Several additions and out-buildings were added over the years to accommodate new equipment, material storage and service spaces.

The interior foundation plan shows masonry bases for the following equipment: crucible furnaces, cupolas, oval casting pits, a converter, clean-out pit, 10-ton open hearth, annealing furnace and drying ovens.

Several major building additions are documented by historic drawings. A one-story addition for bench core makers was built in 1917 and railroad tracks to the building were moved. A new 50-ton open hearth furnace and material storage bins were added in 1928. The building was altered in 1929 for new sandblasting equipment and the north door was enlarged. In 1934 an addition for a core-making oven was built and induction furnaces were added. An electric furnace was provided in 1945. The 1947 existing conditions plan shows the building configuration and equipment after the end of World War II and before the addition of a three-story office and lab to the southeast corner in 1951.

The building is currently being used as a warehouse for the General Services Administration, which took over the Navy Yard Annex in 1963. The only equipment remaining in Building 137 is a 25-ton Cleveland crane, with a five-ton auxilliary, in the central space, and a pair of 10-ton Whiting cranes in the side aisles.

Architectural Information:

Building 137 is a typical example of early foundry architecture characterized by large, uninterrupted interior spaces created by the use of a steel frame and long span

roof trusses. This building type was primarily designed to meet two requirements: to provide long spaces with wide, clear spans in which to operate massive equipment and electric cranes, and to provide adequate natural light and ventilation. The general plan for such buildings was usually a long central nave flanked by two side aisles, defined by a steel structural system of vertical supports and horizontal roof trusses. The large steel beams which constituted the crane runways were also a part of this framework. Natural light was provided by large window areas in the ends and sides of these buildings, and diffused overhead light was admitted by various types of monitor roofs. Adequate ventilation of the strong gases produced by foundry operations was provided by operable sash in both the window walls and roof glazing. (BCT, 1976.)

Building 137 has a wooden pile foundation with concrete pile caps supporting the columns and former equipment bases. The vertical members of the steel frame structural system are I-beams formed of riveted beams, plates, and channel beams. The exterior walls are brick with sandstone trim. The roof is composition built-up material.

The three-story central space is three bays wide and is lit by a monitor roof. The side aisles are each two bays wide and two stories high. These bays are articulated on the principal, northern, elevation by brick piers separating large areas of operable steel factory sash at the first and second floors. The center bay contains an electric door at the ground level, large windows on the second and third floors, and is capped by a stepped gable roof line. The other facades also have regular bays of brick and window wall reflecting the structural bays, but these are obscurred by the numerous productions and attached service buildings.

The building is presently in satisfactory condition, although numerous windows have been boarded up rather than replaced. The brickwork is generally sound, but stained, and that of several auxilliary buildings to the south has been severely chipped by heavy truck traffic.